

ABSTRACT

The present invention provides a burner for use in a combustion-type waste gas treatment system for combusting waste gases emitted from semiconductor manufacturing system, particularly, a deposition gas containing SiH_4 and a halogen-base gas, simultaneously at a high efficiency of destruction, making it difficult for a powder of SiO_2 to be attached and deposited, performing a low- NO_x combustion, and maintaining a desired level of safety. The combustion-type waste gas treatment system has a flame stabilizing zone (15), which is open toward a combustion chamber (11), surrounded by a peripheral wall (12), and closed by a plate (14) remotely from the combustion chamber. A waste gas, an auxiliary combustible agent, and air are introduced into and mixed with each other in the flame stabilizing zone (15), and the mixed gases are ejected toward the combustion chamber (11) perpendicularly to the plate (14).